

# West Virginia Vector-borne Disease Surveillance Report: FOR THE PERIOD: 10/16/11–10/30/11



The purpose of this report is to share descriptive surveillance data related to vector-borne disease activity with public health partners in West Virginia. All information in this report is considered provisional. For questions or comments, contact Rachel Radcliffe (Division of Infectious Disease Epidemiology) at [rachel.radcliffe@wv.gov](mailto:rachel.radcliffe@wv.gov)

## Vector-borne disease surveillance Summary:

During the previous two weeks, 1 case of La Crosse encephalitis cases was documented. Additionally, 4 cases of Lyme disease were verified. As of 10/30/2011, a total of 75 additional vector-borne disease cases have been reported and are currently under investigation in multiple counties throughout the State (59 of which are reports of Lyme disease).

**Table 1. Summary of West Virginia vector-borne disease activity for the current reporting period and 2011 (cumulative).**

	Surveillance Indicator	# Confirmed or Probable Cases <sup>a</sup>		Comments
		10/16/11–10/30/11	Total 2011	
Mosquito-borne	La Crosse infection, human	1	21	
	West Nile virus infection, human	-	1	
	Other mosquito-borne infection, human	-	5	All cases are travel-associated malaria infections
	Mosquito-borne infection, equine	-	-	Specimens submitted: 0
	Mosquito-borne infection, avian	-	-	Specimens submitted: 6
	Arboviral infection, mosquito pool	-	29	Pools collected: 268
Tick-borne	Lyme disease, human	1	84	
	Rocky Mountain spotted fever <sup>b</sup> , human	-	4	
	Ehrlichiosis, human	-	1	
	Other tick-borne infection, human	-	1	Anaplasmosis

<sup>a</sup>Note: Table includes only confirmed or probable cases that have been reviewed and closed by Division of Infectious Disease Epidemiology staff

<sup>b</sup>Includes all spotted fever rickettsioses

## Mosquito/tick surveillance

The West Virginia adult mosquito survey has recently received mosquitoes from the mid-Ohio Valley region (Wood and Tyler counties). Arboviral testing of these specimens will begin shortly.

The West Virginia tick survey has examined the following counties: Fayette, Greenbrier, Jefferson, Kanawha, Pocahontas, Raleigh, Randolph, Summers, and Wayne. Fayette and Raleigh counties have been surveyed three times and we have searched for ticks twice in Jefferson and Summers counties. So far there are no new county records for the black legged / deer tick (*Ixodes scapularis*) and our understanding of black legged tick distribution has not changed. Around four weeks ago, three black legged ticks were recovered from three out of six collecting sites in Jefferson County. Two weeks later in Jefferson County, two adult male black legged ticks were found in a new collecting locality. Additional counties will be examined based upon proximity to known black legged tick endemic counties and recent history of tick-borne disease.

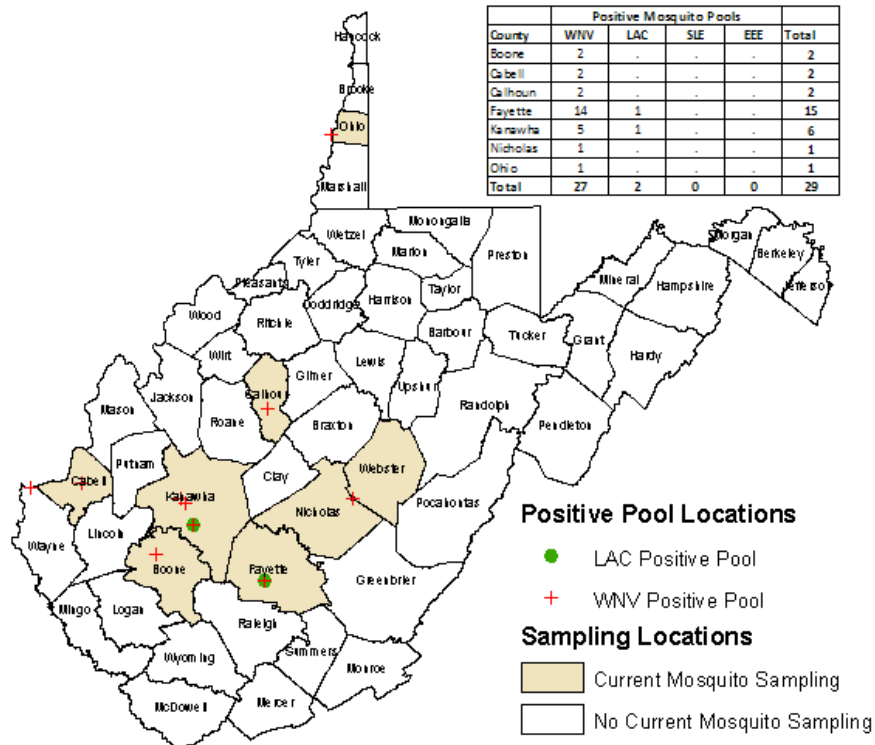
**Table 2. Summary of adult mosquito surveillance for the current reporting period and 2011 (cumulative)**

	Surveillance Indicator	Current (10/16/11–10/30/11)				Total 2011				Comments		
		# Pools collected	+ Arbovirus <sup>a</sup>				# Pools collected	+ Arbovirus <sup>a</sup>				
			W N V	L A C	S L E	E E E		W N V	L A C		S L E	E E E
Adult trapping (pools)	Culex spp.	1		-	-	-	118	6	-	-	-	
	Non- Culex spp.	5		-	-	-	150	21	2	-	-	

<sup>a</sup>Mosquito pools testing **positive** for arboviruses.

WNV=West Nile virus; LAC=La Crosse ; SLE=St. Louis encephalitis; EEE=Eastern equine encephalitis

## VW Mosquito Surveillance Summary: 1/1/2011–10/30/2011



**Figure 1. Counties where mosquito sampling is taking place and locations of positive pools for 2011 to date.**

## VV Tick-borne Infection Summary, 1/1/2011–10/30/2011

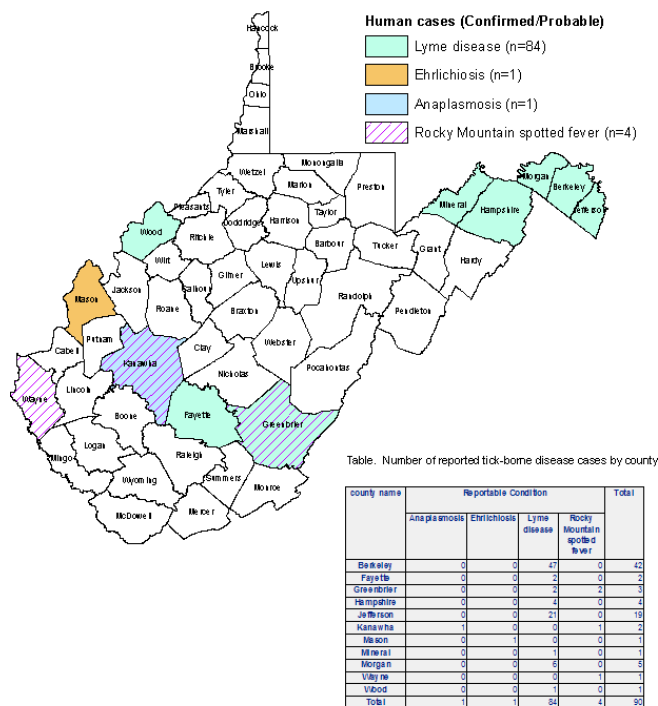


Figure 2. Cumulative 2011 counts of confirmed or probable cases of tick-borne infections by county of patient residence.

## VV Mosquito-borne Infection Summary 1/1/2011–10/30/2011

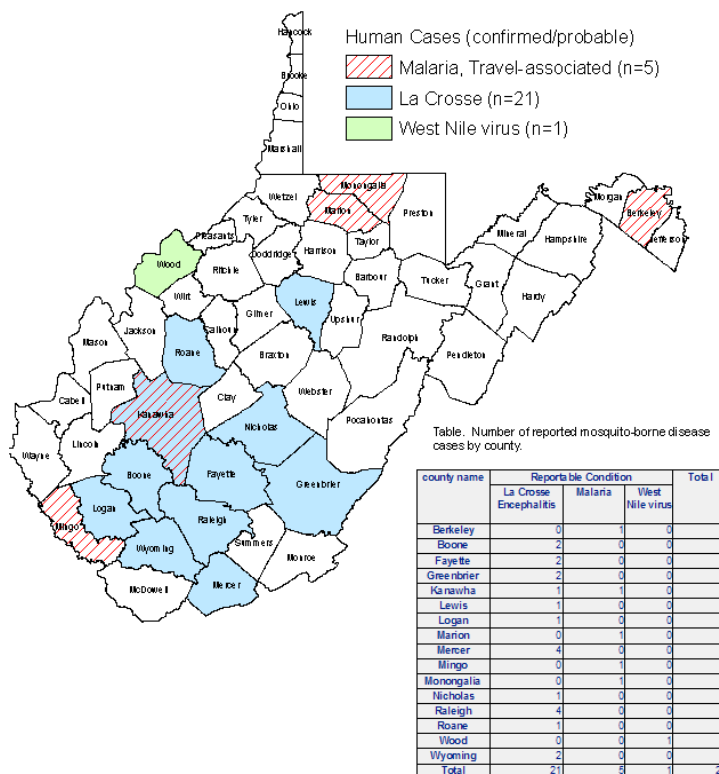


Figure 3. Cumulative 2011 counts of confirmed or probable cases of mosquito-borne infections by county of patient residence.

# CUMULATIVE VECTORBORNE SURVEILLANCE SUMMARY TOTALS (JAN 1 2011 – OCT 15 2011)

County	MOSQUITO-BORNE									TICK-BORNE (human)			
	LAC <sup>a</sup> , human	WNV <sup>b</sup> , human	Other, human	WNV, equine	Other, equine	WNV, avian	Other, avian	WNV, mosquito	Other, mosquito	Lyme disease	RMSF <sup>c</sup>	Ehrlichiosis	Other
Barbour													
Berkeley			1							47			
Boone	2							2					
Braxton													
Brooke													
Cabell								2					
Calhoun								2					
Clay													
Doddridge													
Fayette	2							14	1	2			
Gilmer													
Grant													
Greenbrier	2									2	2		
Hampshire										4			
Hancock													
Hardy													
Harrison													
Jackson													
Jefferson										21			
Kanawha	1		1					5	1		1		1
Lewis	1												
Lincoln													
Logan	1												
McDowell			1										
Marion													
Marshall													
Mason												1	
Mercer	4												
Mineral										1			
Mingo			1										
Monongalia			1										
Monroe													
Morgan										6			
Nicholas	1							1					
Ohio								1					
Pendleton													
Pleasants													
Pocahontas													
Preston													
Putnam													
Raleigh	4												
Randolph													
Ritchie													
Roane	1												
Summers													
Taylor													
Tucker													
Tyler													
Upshur													
Wayne											1		
Webster													
Wetzel													
Wirt													
Wood		1								1			
Wyoming	2												
<b>TOTAL</b>	<b>21</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>2</b>	<b>84</b>	<b>4</b>	<b>1</b>	<b>1</b>

\*Note: Table includes only confirmed or probable cases that have been reviewed and closed by Division of Infectious Disease Epidemiology staff

<sup>a</sup>LAC=La Crosse

<sup>b</sup>WNV=West Nile virus

<sup>c</sup>RMSF=Rocky Mountain spotted fever (includes all spotted fever rickettsioses)

West Virginia Vector-borne Disease Surveillance Report: 9/18/11–10/1/11